



# HOW TO HELP YOUR CHILDREN ACHIEVE IN SCHOOL

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# Introduction

Parents are showing increasing interest in helping their children to do well in school. In the Eighth Annual Gallup Poll (1978), two out of every three parents listed lack of parental concern, attention, and supervision as major reasons achievement test scores had been falling. But many parents also believe that they need advice from educators before they can help their children to succeed in school. This booklet was written by educators for parents of elementary, junior high, and senior high school students. If you are one of these parents, the ideas in this booklet can help you teach your children how to study and learn.

## Parents Can Make a Difference

How can you help your children become more successful students?

Certain skills, attitudes, and behaviors characterize successful learners. Helping your children to learn these skills can, in turn, help them do better. Not all children can be Einsteins or Picassos—or even straight-A students—but many children can do better with a little help.

## Who Are Successful Students?

Successful students are *motivated* students who accept some responsibility for their own learning and who understand that success comes from their own efforts. They are the ones who do their best in school. They have the ability to *pay attention* and concentrate on school-related tasks. They can ignore or reduce distractions, from the environment or from their own thoughts, that would interfere with learning.

## Successful Students...

- ✓ are motivated
- ✓ pay attention
- ✓ understand ideas
- ✓ remember facts and ideas
- ✓ work without stress

They have the skills to *understand* the ideas that are presented in school and in their textbooks, and they know how to get help if they have trouble understanding. They can *remember* the facts and ideas they need to achieve in school and to do well on national tests. In addition, successful students can do all this in a relatively relaxed or *stress-free* way. They might be concerned about doing well in school, but they do not create excessive pressure for themselves.



The five parts of this booklet will show you a number of ways to help your children perform to the best of their ability in school

- In Part One, we discuss attention, and how you can help your children focus on their schoolwork.
- In Part Two, we talk about keeping your children interested and motivated so that they accept the responsibility for their schoolwork.
- In Part Three, we describe techniques for learning and remembering. Thus, when your children are given new information, at school or at home, they will have the skills that help them learn and remember.
- In Part Four, we offer a plan for studying, taking notes, and managing time. This approach will help your children become independent learners—students who complete assignments without constant prodding from parents and teachers.
- In Part Five, we discuss strategies for preparing for tests and for taking them.



Like any new skill the learning and study skills we present will take time and patience to master. With patience, care, and guidance, you can help your children to develop them.

# 1

## Helping Your Children Pay Attention

Teachers often hear parents complaining:

"She would do so well if only she would pay attention to her lesson"

"I know he's bright, but he just doesn't care about schoolwork."

These statements reflect two common problems: difficulty in paying attention and poor motivation. The best study system in the world

will not help children who are not interested in school or who cannot sit still long enough to read a chapter in a book. Often, the first steps in improving learning are to increase motivation and to lengthen the time of attention given to particular tasks. These are areas where you can make a difference. In this section, we discuss ways you can help your children to pay attention to their schoolwork. In the next section, we will discuss ways you can help your children become more interested in their schoolwork.



## Paying Attention

Teachers and parents often tell children to "pay attention," because they realize that students will not learn unless they keep their thoughts and their actions focused on the task to be mastered. As an adult, you are probably able to pay attention easily under most circumstances. Presumably, you have learned how to concentrate on a specific task and ignore distractions and you are able to attend to what is important and ignore what isn't.

Think about yourself right now as you are reading this booklet. If you are at home, there are probably many things going on around you that you are able to ignore fairly easily. For example, while you are reading, are you aware of the whirr of the refrigerator, the noise of the air conditioner or the furnace, or the sound of cars outside? Perhaps someone else is watching television nearby. Are you able to keep reading rather than listen to the television?

This ability to focus your attention where you want may seem simple to you. But paying attention is a skill, and like all skills, it must be learned. Many students cannot control their attention because they have never learned how to direct their thoughts and energies.

To understand this better, think about a place where there are many sights and sounds that are not familiar to you—perhaps a factory full of people and noisy machinery, or the director's booth in a TV studio, or a kitchen next to a hotel banquet room. In one of these unfamiliar situations, it would be hard for you to read a newspaper or magazine and "tune out" everything going on around you. In many ways you would be like a child who has not yet learned to control his attention or "tune out" even the most common distractions.

If a child has not learned to pay attention, orders to "Pay attention!" simply won't help. To use our example of a TV studio again, it would take time for you to adjust to the noise and activity around you.

## Three Good Ways to Pay Attention

Instead of ordering or threatening, parents can help children improve their ability to concentrate by teaching them a few simple methods. The

following are three good methods to use in helping your children improve their attention:

- 1) using positive self-talk and positive images
- 2) asking questions about the work
- 3) setting specific study goals.

Let's see how each of these works.

1. *Using self-talk and images.* Perhaps you've watched some sporting event, such as a tennis match or a baseball game, and noticed that the players often seem to be talking to themselves. You see one player standing alone, muttering to himself, "OK, you can do it! Keep your eye on the ball." We call this "self-talk"—using words or sentences to help control attention. Just as we can use words to give directions to others, we can use them to direct our own actions too. Self-talk is an important tool for controlling attention, and children can be taught to use it.

People also improve their attention span by controlling the images they see in their mind's eye. For example, when a runner is half-way through a race, she may picture herself crossing the finish line, or a dieter may imagine his new appearance when tempted by an ice cream cone. These images serve the same purpose as self-talk. They help keep attention focused on a difficult task and they increase motivation to complete the task. Like the baseball player who talks to himself, or the runner who pictures herself crossing the finish line, children can use both self-talk and images to direct their attention away from distractions and toward a task at hand, whether it is homework, classwork, or a test.

Many students do talk to themselves or imagine scenes when they are studying, but the self-talk and the images they are using are not helping them focus on their work. For example, a student may sit down to study and after ten minutes find herself thinking about other activities. Images of tomorrow night's game or Saturday at the beach are stiff competition for a chapter of American history! At this point, the student may say to herself, "I'm hopeless, I can't concentrate. I'll never be able to study or learn, so why bother?"

In this example, images and self-talk are working *against* the student. Distracting images (the

game, the beach) can lead to negative self-talk ("It's hopeless.") and, finally, to a negative attitude about school and about one's self. However, by carefully choosing words and images that help complete the task, the student can increase his or her ability to pay attention.

Let's take the same student and change the self-talk and images. This time, our student sits down to study and finds thoughts about other activities distracting her from the book. The student herself must learn to recognize these distracting images and, instead of giving in to them, must say something like, "I know I'm getting distracted, but I can fight it. I'll study for one more hour and then take a break." Instead of seeing herself at the beach, the student should try to picture herself taking the history test, calmly and confidently, because she has studied the material.

Once on the track of positive self-talk and images that relate to the task, the student can go back to studying, using additional sentences and images to direct attention toward the material at hand. When you are helping your children learn to use positive self-talk and images, you can suggest that they tell themselves: "As I read this paragraph, I must think about what I must learn

from it. I must find its central message. If I look away from the page, I must be able to explain to myself the meaning of what I have just read." Sentences like these will help students pay attention to their homework.

2. *Asking questions.* Another way to direct attention is to ask questions while studying. For example, when students are reading about American history, they might ask themselves questions like these: "What were things really like during that period of American history? Let me picture the workers in the factories and what their lives must have been like before they decided to form unions. Would I be for or against unions if I were one of those workers? Let me picture the chain of events that led to the formation of unions."

Some general questions you can suggest to your children are: "What is this paragraph about? Who did what and why? What is the evidence that supports the central idea in the passage or paragraph? Is the argument true or false? Why? What is the principle presented in the text?"

Asking themselves questions serves two purposes. First, it helps students bring their wandering attention back to the task at hand. Second, it helps them keep their attention on the task.



3. *Setting specific study goals.* One way that often improves attention is to give your children specific goals to work toward as they study or read an assignment. Ask them to study a book or lesson until they have achieved the goal you gave them. The goal you set will depend, of course, on the lesson and on your children's ages. You might want them to study until they can tell you the main point of the paragraph, until they can solve a specific math problem, or until they learn the specific names, dates, and places mentioned in the text. Discuss each goal with your children. Then together set reasonable goals, given what you already know about their study habits. When you are setting study goals, remember that many small goals, presented one after another, are better than a single large one.

You can also set goals for tasks that do not involve reading. Although the goals will be different, they should help the children concentrate on the important parts of the lesson. To help your children develop skills in remembering music, your goal might be to play a short

musical piece in its entirety. Another goal might be to have your children draw a map of a country from memory, in order to learn the geographical relationship of principal trade centers.

As your children become more used to using specific goals to guide their studying, you can ask them to construct some of these goals themselves. Encourage them to divide their study tasks into small segments, with a goal for each. ("I'll read this section and explain its main point. Then I'll go on to the next section.")

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These three strategies—positive self-talk and images, questions related to the task, and specific study goals—will help your children develop better skills for paying attention to school work. You can help them become better students by helping them to learn these skills.

## 2

# Keeping Your Children Interested in Schoolwork

As we turn to motivation, we must focus on one important idea: students have to take part of the responsibility for their own learning.

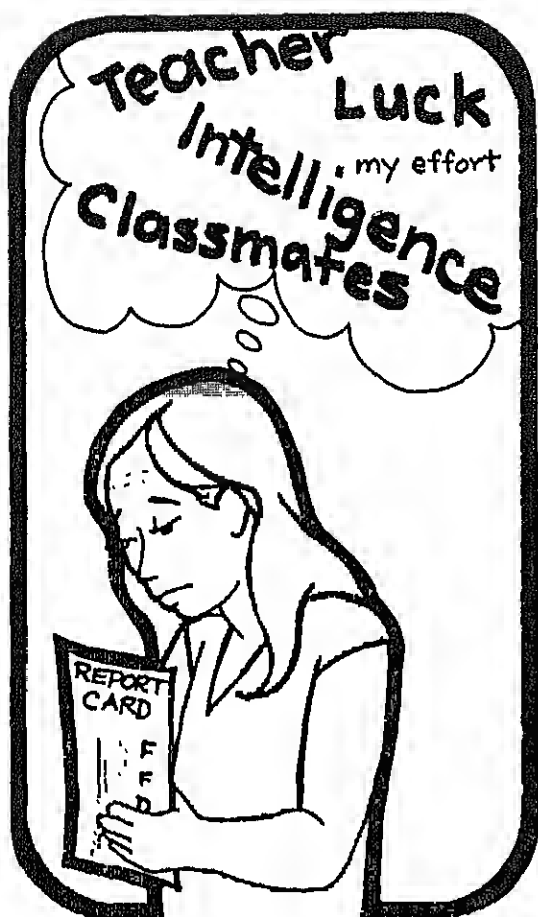
Learning is a joint effort. This means that everyone must contribute if students are to learn successfully. There is no doubt that teachers are responsible for teaching, and parents for parenting. But students must realize that no one can do their learning for them. Although teachers can instruct them and parents can lead and help them, in the end students can understand and remember only through their own efforts.

For children to *want* to put time and effort into studying or working hard, they have to *believe* that the hours spent studying or the amount of work they do will make the difference between success or failure. Many students do not accept this premise; they do not believe that studying more will make a difference. They believe other factors control their successes and failures—for example, teachers, basic intelligence, or luck. While it is true that these factors can affect success in school, children often exaggerate the role these factors play. They tend to ignore their own responsibility for their successes or failures.



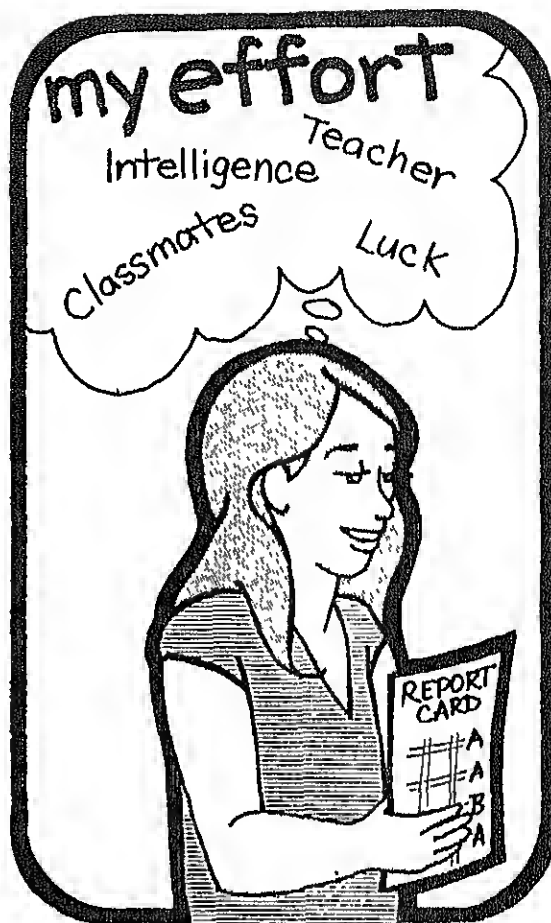
How can you help your children *want* to study more? You can help them accept the fact that the amount of effort they exert determines whether they succeed or fail in school. And the next time your children bring home written comments or report cards, ask them *why* they succeeded or failed. Listen to their answers and try to understand their point of view. Then try to help them understand why they received those particular comments or grades. Show an interest in their school experiences and take what they say seriously. Review their schoolwork with them and discuss ways in which they can improve their grades.

You may find other types of problems to deal with. Situations beyond your children's control could also be contributing to success or failure in school. For instance, the classwork may be too hard or too easy. In that case, you may want to meet with the teacher to discuss the problem. Your children may have problems seeing, hearing, or speaking, or may have emotional problems, in which case you may require medical or psychological advice.



On the other hand, the problem may lie in your children's view of the school situation. They may have negative feelings toward classmates or teachers, and feel that other people keep them from learning or that they just aren't "smart enough" to succeed. If this is the case, you should try to help them change their view of the causes of their success or failure. Sometimes a gentle reminder to try harder will help. Sometimes children will try harder if they know you aren't satisfied with the amount of time and effort they are putting into their schoolwork.

Praising success is often a good technique. Always be careful and sincere with your praise, and avoid overdoing praise for easy tasks. Sometimes praising or approving successes on simple tasks that require little effort may be a mistake. If you praise everything equally, your



children will quickly learn that your praise means nothing. And it might lead them to feel that you do not believe they have much ability.

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To improve self-motivation, it is not enough that you help students achieve success, or avoid failure. Students who always succeed, no matter how little they work—just like students who always fail—may come to believe that they are not the ones who caused these outcomes. Then they may not make an effort to learn. Motivating your children to succeed in school means helping them change the way they think about themselves. It means making them realize that *they* can improve their school performance if they work at it.

### 3

## Teaching Your Children Techniques for Learning and Remembering

Remember when you were in school and the teacher said, "Know the material in chapter seven of your book for the test on Friday"? Most of the time your teacher told you *what* to learn, but not *how* to learn it. You were pretty much on your own when it came to figuring out how to remember all those facts, dates, and events.

During their school years, children are presented with a great number of new facts, ideas, and concepts that they must learn. We believe that how well children do in school is determined not only by intelligence, but also by the methods, or *strategies*, that they use to master all this new information. Children need strategies because effective learning requires their active participation.

One of the most important aspects of learning new information is that it must be well understood to be remembered. Plowing through words on a page or memorizing hundreds of facts that seem useless and unrelated is an ineffective way to learn.

Understanding in school is not something that "just happens." Understanding takes work. It requires taking an interest in school subjects, and it requires relating new information to information already known. This process is called *active* or *generative* learning, learning that brings interest and knowledge to the task, not just sitting back and letting the teacher or textbook do all the work.

Active learners generate relationships between what they already know and new information. By doing this, they can more easily understand and remember the new information. Knowledge already acquired acts as a hook that helps keep the new knowledge in mind. Even remembering

your father's or grandfather's old war stories can help make the textbook discussion of World War II more meaningful and therefore easier to understand and remember. Because strategies for active learning are so important, they should not be left to chance.

What are some *strategies* that you can teach your children to make them active learners? The strategies are not nearly as complicated as you might think. In fact, you probably already use some of them. In this section, we talk about five strategies for active learning. They are:

- 1) *asking questions*
- 2) *making inferences*
- 3) *creating analogies*
- 4) *finding the main ideas*
- 5) *categorizing information.*

### 1. Asking Questions

One strategy active learners often use is *self-questioning*. In Part One, we discussed how self-questions could help focus attention. Self-questions have another benefit; they help learners by forcing them to think about the material in order to answer the questions. When listening to presentations in class or when reading textbook assignments at home, it is helpful to students to think about the topic and make up some questions that will help them focus attention and improve concentration. These, in turn, will help them learn and remember the material.



For example, if a student is preparing to read an assignment about World War II, she might try to remember anything she already knew about the war. She could then think up some questions for herself to answer while reading. "What caused World War II? What major events took place? How did the war change the way people lived? How were national boundaries drawn before and after the war?" (Your children might think up many different questions.) The important thing is that by asking questions she begins to think about the topic and some areas within it that interest her. As she begins to read the assignment, other questions will occur to her, and some of the questions she originally thought about may seem less important. That is all right; the important thing is that while she is asking and answering questions, she is *thinking* about the material.

## **2. Making Inferences**

*Making inferences* involves thinking about the information, ideas, or opinions we hear or read about, and trying to draw conclusions from this new information. If students are reading about the impact of a new invention, they might think about how it would change people's lives and habits. Or, when studying the circulatory system, students might think about how diet, activity, or illness can affect the system. Making or creating inferences is an important activity for learners. It forces them to think about the new material, thus making it more meaningful and easier to remember.

## **3. Creating Analogies**

Another way to make new and unfamiliar information more meaningful is through *analogies*. You can help children create analogies by suggesting that they think about things they know that might relate to the new information. Also, you might suggest that they look for similarities or comparisons between what they already know and the new material. For example, to explain how insulation works in houses, you might suggest comparisons between insulation and people's clothing or the fur coats of animals. Also bear in mind that fables, fairy tales, and parables are also analogous to situations in real life.

To take an example from school, suppose a student is trying to learn the difference between the arteries and the veins (arteries are thick and

carry oxygen-rich blood from the heart, veins are relatively thin and carry oxygen-poor blood to the heart). The student might know something about household plumbing and be able to relate this new information to water pressure and the way a sink works. Although the two structures and the way they work are not exactly the same, there are enough similarities so that knowing about sinks, clean water, and draining out dirty water could help the student grasp how the heart, arteries, and veins work. The similarity does not have to be exact for this strategy of creating analogies to help students learn and remember new information.

As another example, suppose that your child is trying to understand how the court system in the United States works. He could try to create an analogy between the legal forms of settling disputes and his own experiences with arguments and disagreements. The judge would be similar to the teacher or parent who tries to help settle differences or decide who is to blame. The jury would be analogous to a group of friends trying to decide who is right when there is a disagreement between other friends. These are not exactly the same processes that happen in a court of law, but thinking about these more familiar experiences can help add meaning to what the student is trying to learn about our legal system.

Creating analogies is a way of building temporary mental bridges between what is already known and new information. After students use this new information, it too becomes familiar knowledge, and students can then use this new—but now familiar—information to help them acquire more new information.

While teachers often use analogies in school, students are seldom taught how to use them. For example, most of us looked at diagrams of pies when we were learning about fractions. Thinking about cutting up a pie helped us to learn what "one-half" or "one-third" meant. Your children can use this same technique by thinking up situations or pictures that make analogies to whatever they are trying to learn.

## **4. Finding the Main Ideas**

Whether new information is being presented in class or in a textbook, the discussion usually includes a number of main ideas or facts and a lot of material to support them. Students often

make the mistake of concentrating on everything rather than trying to find the main idea. For example, if your children are reading about immigration patterns of people from different countries, it is more important that they learn the major causes and effects of shifting populations than all the numbers of people who moved in different years. The purpose of the examples or specific numbers is to help make the general principles and trends understandable. Although reading examples helps students to learn about immigration, the examples are not the important points to remember. Important issues might include: Why do people immigrate? How do they do it? What are their lives like in the new country?

Finding the main idea is related to the strategy of self-questioning we discussed earlier. As students listen or read, they must often ask themselves, "What's the point here?" If, as students read the text, they constantly look for the main idea, they will be concentrating on learning the

important material. Also, the search for main ideas helps to keep students actively involved while studying.

## 5. Categorizing Information

Many school activities involve learning and remembering large amounts of information, or lists of names, dates, or other items. When we have many items of information to learn, it helps if we can group them into categories. All the items in a category must have one or more similar characteristics. For example, instead of trying to learn and remember the names and characteristics of every different musical instrument, students in beginning music classes learn to divide instruments into categories such as percussion, woodwinds, strings, and brass. Each category contains instruments that make sounds in similar ways. In a science class, lessons about animals divide them into groups such as reptiles, mammals, fishes, birds, amphibians, etc.



Creating these smaller groups helps students to learn new information because it is easier to remember several smaller groups of related items than to remember one large group.

Groups can be created in many different ways. For instance, students studying about World War II can group the different events by geographic location, by different years of the war, or by specific countries involved. Students studying the vocabulary of a foreign language can divide the words into nouns, pronouns, adjectives, and verbs. Creating categories helps learners stay actively involved. It also makes the learning task more manageable by breaking it into smaller parts.



All the skills we've discussed so far—paying attention, being willing to work, and being actively involved in learning new information—are needed to succeed in school. But, even highly motivated learners who pay attention to their school work and who assume much of the responsibility for their own learning must have a set of strategies for effective learning and remembering if they are to achieve as well as they can in school.

Just as they would with any other skills, your children will have to practice these study skills before they become really good at them. In fact, at first many of these strategies will seem very time-consuming and distracting. (Think back to the first time you tried to ride a bicycle or race down the street on your roller skates. The rough and unsure performance of someone trying to learn a skill is very different from the performance of someone who has already mastered it.) Have patience and try to understand your children's problems and frustrations in trying to

master these new learning skills. An accepting and encouraging attitude on your part will help your children to keep trying.

In addition to practicing these learning and memory strategies with school-related tasks, such as studying for a test or completing a homework assignment, you can use everyday opportunities to encourage further practice. For example, if you are talking to your children about a new car for the family, discuss how creating categories helps us to remember all of the cars that are on the market. Discuss how the car you are planning to buy is similar to, or different from, other cars. Are you buying a small car or middle-size car (grouping by size)? Are you trying to decide between a sports car and a sedan (grouping by model)? Automobiles can be categorized by manufacturer, size, body style, and other ways. When you are explaining how a household appliance works, try to create an analogy as part of your explanation. Base it on something that your children already understand. For example, an air conditioner is like an open refrigerator with a fan to move the air around the room. Using these strategies yourself—and explaining how you use them—will help your children to understand and use them.

Good teachers use all five of the learning strategies in this section. But teachers have so much material to cover in school that they cannot give your children as much individual attention as you can at home. Many students understand these methods when their teachers use them, but need to be shown *how* to use these same methods to help themselves learn. You can help your children by talking to them about the five different learning and memory strategies and making sure they understand and are able to use them.

## 4

# Helping Your Children Study and Take Notes

In the last three sections we have suggested many ways in which you might help your children become more *active* and *responsible learners*. Active and responsible learners relate material that is being studied to what they already know and understand. They are interested and involved in learning. In this section, we talk about how all of these suggestions together form a system that will help your children have a more active and organized approach to studying. Using a *study system* can help students make the best use of their study time and may allow more time for extra-curricular activities too!

Our study system has five steps in it. We have found that breaking studying down into these different steps makes them easier to discuss. We hope that when you discuss these steps with your children, they will think about how their own actions contribute to their performance in school. The steps are:

- 1) finding a *place* and a *time* for studying
- 2) *previewing* the material
- 3) *reading* the material and *generating thoughts* about it
- 4) *taking notes* in an effective way
- 5) *testing yourself* from the notes.

### 1. Finding a Place and a Time for Studying

Whether you live in a one-bedroom apartment or a sprawling ranch house, you can set aside a *place for studying*. This place can be a desk in a

bedroom, or it can be the kitchen table. All your children really need is a table to work at in a relatively quiet place that has good light and a comfortable chair. It is also helpful if some supportive materials, like a dictionary and scrap paper, can be nearby.

Having the skills needed to get the most out of studying and having a place to study will not help your children unless they also set aside a *time for studying*. Finding time for work, play, and the daily chores of living is often difficult, especially for busy teenagers. But, by learning to manage time more effectively, students can fit in school, study, and fun.

Many of us do not realize how we spend our time during a typical day. You can help your children schedule their time better by first having

WHAT I DID TODAY		
DATE	TIME	ACTIVITY
Sept. 8	8:30	Go to school
	3:30	Home from school. Eat snack.
	4:00	Watch T.V.
	4:30	See friends
	6:00	Eat dinner
	6:30	Walk dog
	7:00	Homework
	7:30	Watch T.V.
	8:00	Talk on phone
	8:30	Work on model airplane
	9:30	Go to bed

them find out how they are presently spending it. Suggest that they keep a record or log for a few days or a week. Every half hour have them write down what they did. They will probably be

## MY PLAN FOR THIS WEEK

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
a.m. Free time						a.m. rehearsals for school choir
p.m. help mom clean garage visit Aunt Flo study history book	← after school Write outline for English essay Call Mrs. Murray about Fri. night 462-1872 Study for science class	Write 5 page English essay Study for Math test Friday	Free time nothing planned. (Maria might come over) Shopping? Finish novel Go over history notes	Dentist appt. 4:30 Study for math test tomorrow Read science chapter	Free time nothing planned Babysit for Mrs. Murray Work on history project	p.m. make schedule for next week clean up room movies with Frank

surprised to find out how much time they are wasting. Creating a schedule can help them make better use of their time.

A weekly schedule that includes time for studying, relaxing, and seeing friends will give them an idea of how to plan their week. For example, if your daughter wants to go to the Wednesday night ball game, but has a math test on Thursday, then she needs to make sure she has scheduled enough study time for her math test before Wednesday night.

Schedules will help your children see where they can shift and trade among things they have to do and want to do. But it is important that schedules be flexible. You do not want you and your children to become prisoners of them. For example, if you and they are unexpectedly invited to go fishing on Saturday, you may all have to shift your schedules. Chores you had planned to do on Saturday might have to be shifted to Sunday. Your children might have to mow the lawn on Friday afternoon instead of on Saturday and then study on Friday evening instead of seeing friends, as originally planned. In

other words, if an unexpected event comes up, a modification of plans must be possible. We all make trade-offs with our time. The main point is that with a schedule, students can see how to find time for the important things, including studying.

### 2. Previewing the Material

In earlier sections, we pointed out that finding the main point of a given area of study is a good learning strategy. But children cannot expect to find the main point right away in material that is totally new. Being immediately able to identify and remember the main points of a new book or chapter is nearly as difficult as locating a friend's new home without a street map! You may have no means of relating the new street address to streets you are already familiar with in the area. A map provides a context that helps you to decide if you have gone in the right direction or if you have gone astray.

A good textbook provides a "map" to help students find their way through the subject mat-

ter. The "map" is made up of the introduction, headings, and summaries. Most books, especially textbooks, include an introduction, or preface, that explains the purpose of the book and provides an overview of the book as a whole. Also, each chapter may begin with a brief introduction. If not, there usually is a summary at the end of the chapter that may serve as an excellent overview of the material covered in the chapter. Headings within the chapter should form an outline of the main topics. Your children can use these headings as a rough "map" of the information. The map will be complete when the details are added through reading. Students should preview the material before beginning to read the text itself, and should construct a mental "map" for themselves by reading the introductions, headings, and summaries.

### 3. Reading and Generating Thoughts

The stage is now set for reading each chapter. While reading, children should try to fit details into the mental outline or "map" provided by previewing. Rather than consider the material as a list of unrelated facts, they should try to organize the material to form a complete picture, and at the same time should generate relationships between the material and their own knowledge. To assist in this task and to keep their minds from wandering, students should use the attention-focusing methods discussed in Part One: self-talk, positive images, and questions. Students can use information from the previewing step to ask questions that they expect to answer. A good idea is to pause before each new section of a chapter (generally where there is a heading) and use the five learning strategies from Part Three to see if they really understand the material. Can the students create relevant analogies? Can they tell you the main ideas of the section? Have they really read it? Or were their eyes just scanning the page while their minds were elsewhere?

When students use the attention-focusing strategies and learning strategies to understand what they have read, they are *elaborating* on what they are reading—they are generating connections between what they already know or have experienced and what they are reading. This helps to make the reading material more understandable and easier to remember. Students do not have to wait until the end of a section to elaborate on the reading. Sometimes a

section of a chapter has more than one complete idea. Stopping to elaborate part way through may help students to understand the text better. However, this depends upon the reading material. For example, students may need to stop more often in a math textbook than in a history textbook. Your children should try several different methods and use those that work best for each subject.

### 4. Taking Notes

Even with the best of memories and learning strategies, it is impossible for anyone to remember everything that he or she reads. It is also unnecessary to try to remember everything. Students should learn how to select the important information. This information should be reviewed and studied so that it can be remembered and used in other situations. But rereading each chapter is a time-consuming way to review material. A more efficient way is to *take notes* on the main points in the text. The notes then provide a short summary of the important information in the chapter. They also play a large part in preparing for tests.

Taking notes in class is probably even more important than taking notes when reading. It is possible, though tedious, to reread a book, but it is nearly impossible to rehear a lecture or class discussion. Some students have tried to use tape recorders in class for this purpose. However, listening to the tape requires a time period equal to the class period and therefore is inefficient. (An exception to this is where the student must be absent from class for an extended period of time, as in the case of prolonged illness.)

How can parents help children learn what is important to write down when taking notes? This is a difficult question to answer, but fortunately both teachers and books provide clues to what is important. For example, what a teacher writes on the board is probably worth taking down in notes. What the teacher spends a lot of time on is probably important information.

A teacher's tone of voice often gives clues about what is important. For example, the teacher may slow down to state something clearly and precisely when it is important and should be remembered. Teachers and books also provide clues that important information is coming by using phrases such as, "three reasons for...", "the purpose of ...," "in summary...", etc.

Books often use ALL CAPITALS or **BOLD FACE TYPE** or *italics* to indicate important points that are worth remembering. These points should be in the student's notes. Diagrams and tables in books are used to clarify main ideas. Many students skip over diagrams in books, but these can greatly assist in understanding written materials, and are useful aids in studying.

If the students own their textbooks, there is a time-saving alternative to taking notes—marking the books themselves. (Most books used by students from elementary through high school belong to the school rather than the students and should not be marked up because students in other classes will be using them. Students should write only in their own books.)

If students do own their books, they can use the following ideas for making notes in the books:

- |                      |   |
|----------------------|---|
| Underlining:         | used sparingly to indicate main ideas—when more than two lines would required underlining, a vertical line in the margin can serve the same purpose (a high-light pen can be used to color im-portant words, rather than under-line them; this method may pro-duce fewer distracting marks) |
| Asterisks:           | placed in the margin to indicate very important points  |
| Numbers:             | placed within the text to indicate a series or list of points to be remembered  |
| Circles or boxes:    | placed around new words to be learned   |
| Notes in the margin: | the student's own summaries, references to other pages, or questions and ideas that come up.  |

When using these techniques, students should be careful not to cover up the words. The value of notes like these lies in the fact that when it is time to review, the student does not have to read over the entire text again; the important information is easy to locate. (Again, although this marking system may seem easier than taking notes, students should not use it with books that belong to the school; they should take notes instead.)

MAIN TOPICS	NOTES ON CHINA
Major Cities	Four major urban areas are HONGKONG, SHANGHAI, BEIJING, GUANGZHOU.
Government/Leaders	National councils include the National People's Congress, the State Council, the Central Military Commission, the Political Bureau of the Communist Party, and the State Commission for the United Front Work.
Agriculture	Crop areas in the South include rice, sugarcane, cotton, oilseeds, and fruits.
Climate	Rainy seasons occur in the south, while the north is dry.
Industry	Light manufacturing and repair work is common.
Population	Most of the people live in the north.

One note-taking method is to use large (8½ x 11 inch) sheets of looseleaf notebook paper. This size allows students to include diagrams as well as written notes. The loose sheets permit putting notes from several sources (class, books) and handouts in the same notebook in an organized fashion.

The key to this method is to draw a vertical line approximately two inches from the left edge of each sheet of paper. This column is used later for key words and phrases from the notes. During class or while reading, students should write on the right-hand side of the page. Notes should contain only important information that supports or explains the main points. Using a paragraph-like or modified outline format generally works best. A modified outline contains ideas written as phrases rather than as complete sentences. Supporting details are indented below the main points. However, it is not necessary to use Roman numerals, letters, or numbers as they are used in a formal outline. Abbreviations are fine as long as the student can later understand what they mean. Most of all, the notes should be written legibly; trying to read scribbled notes is time-consuming.

Students should read their notes over again as soon as they can after the class or after reading. That way they can complete or write out more clearly any incomplete or confusing notes while the information is still fresh in their minds. The left column can be used to jot down a word or phrase that represents the major divisions and subdivisions in the notes. These phrases serve as headings to help locate specific sections within the notes for review. They can also be used to create questions for self-testing. Examples of phrases that might be used for a lecture on the American Revolution are: "causes," "Declaration of Independence," "major battles," etc.

## 5. Self-Testing

Very often students review all of the material they have read, investing the same amount of time and energy on sections they have already

learned as on sections they have not learned. By *testing* themselves, children can determine what they know and what they don't know in the material and can spend more time *studying* what they don't know, while being careful not to neglect other areas.

For example, suppose your children are trying to learn about China in their social studies unit. The chapter on China in the textbook deals with many aspects of life in China, such as the names of main cities, agricultural products, the political system, and the Chinese leaders. All this information should be in the notes about this chapter. Your children can use these notes to make up test questions to discover which of the topics need extra review and study.

Or perhaps you can use your children's notes to make up test questions for them. For example, you might ask, "What are the chief agricultural products of China?" "Why does China place so much emphasis on growing food?" "Name two large cities in China." "What type of government does China have?" Or, "How does the government affect the lives of Chinese people?" The answers to these questions will tell your children (and you) what they need to study most.

When reviewing the notes, children should test themselves by covering the right-hand side of the page and making up questions from the phrases in the left column. They should try to answer each of the questions and then check the answers for correctness by reading through the corresponding notes. In this way, they can decide for themselves which sections of the material need more review and which have been learned.

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To summarize, you can help your children become better learners by giving them ideas on how to pay attention, by helping them accept responsibility for their learning, by helping them learn strategies for understanding what they read, and by helping them learn good study habits. We have suggested a system for studying that includes:

- Finding a *time* and *place* for studying
- *Previewing* the material





- *Reading the material and generating thoughts about it*
- *Taking notes in an effective way*
- *Testing themselves from the notes.*

If your children use this system, they will have a structured approach to each learning task. Although at first the system may seem to require

a lot of time, after students have tried it several times and the system has become a habit, studying will probably take *less* time than before.

Your children may seem uncomfortable with these new approaches at first, but that is natural with any new way of doing things. After they've used the five-part study system for a while, it can become as natural as the study methods they now use, and much more satisfying and effective.

## 5

# Improving Your Children's Ability to Take Tests

### Fighting Test Anxiety

The techniques we presented in Part One—self-talk and images, specific goals, and self-questions—can help focus attention during study and classwork. These techniques can also help in other situations. For example, self-talk and images can help combat a common, but serious problem, *test anxiety*. Many children worry too much about tests or examinations. Often this worry can be so intense that it causes students to avoid studying or to “blank out” on exams and forget what they have studied.

You may not have thought of test anxiety as a problem, but it often is. Some students who worry about success in school, especially about doing well on tests, also begin to worry about themselves and their future. They sometimes become afraid of failure, rather than feeling challenged by the prospect of success. They then become anxious about tests and their own ability. This test anxiety can lead them to criticize themselves severely, and to feel incompetent in the area of the test.

In other words, anxiety can direct the students' attention away from the material to be learned



and away from productive ways to study. Their thoughts can turn to self-criticism, to blaming teachers or parents for their predicament, and to worrying about what others will think. As a result, students often become less organized and less effective in their study habits. This can lead to poor test scores and low grades. Some students might decide that poor grades indicate that they are not smart enough to do well. They may not realize that the poor grades resulted from not studying enough.

What can parents and teachers do about this unfortunate sequence of events? Remember that this problem involves attention. Help the student to redirect attention away from fear of failure and toward productive ways to do well on the test.

Often, students who are worried about tests are told to relax, to think about something else, and to stop worrying about the test. However, this advice does not solve the problem. It does not help students prepare for the test, nor does it reduce their fear of failure. Therefore, in the next section we give hints on how to relieve test anxiety.

### Test-Taking Hints

Studying should not be left until the night before an exam. "Cramming" tends to increase anxiety, which in turn interferes with the ability to study. Students may be fooled by the fact that they can remember the information that has just been read or reviewed. But real learning occurs through study that is spaced over a period of days or weeks. It includes understanding the information, relating the information to what is already known, and reviewing the material on more than one occasion. By reviewing over a period of days or weeks, your children should feel prepared when examination time arrives.

Here are some ideas that will help students in taking tests. First and foremost, students should read all directions carefully. If they do not understand the directions, they should ask the teacher to explain them. Then, students should look over the whole examination briefly to see what types of questions are included (multiple choice, matching, true/false, essay) and, if the information is given, the number of points for each question. This information will help students use the time appropriately. It will keep them from discovering in the last 5 minutes that there

is an essay question worth 25 of the 100 points still to be written.

When taking essay exams, it is wise for students to read all of the questions first and to use the margin for jotting down phrases that relate to the answers. These phrases will help students write the answers later. If the questions do not have to be completed in the order given, starting with the easiest question can build confidence and ensure that credit is received for information that is known. If time is running out and a child is unable to complete the answer to a question, the best bet is to outline the answer, putting down as much information as possible in the time remaining. It is quite likely that the teacher will give partial credit to students demonstrating knowledge of the answer. If there is time remaining at the end of the exam, it is wise to use this time to re-read the answers and add more information where needed. A crucial factor on essay exams is legible handwriting. It is impossible to credit an answer that cannot be read.

Many students waste time on objective tests such as matching, true/false, or multiple choice, by worrying over questions for which they do not know the answers. If students do not know the answer or can't reason it out, it is better to skip the question, placing a mark next to it to identify it, and go on to the next question. If there is time remaining at the end of the exam, the student can then go back to the unanswered questions.

Parents ask, "Should my children guess?" The answer to this question depends on whether there is a penalty for guessing. Sometimes a score is based not only on the number of questions that are answered correctly; sometimes points are taken off for wrong answers. That means there is a penalty for guessing. If there is a penalty for guessing, students should not make *wild* guesses. If they cannot answer a question, and there is a penalty for guessing, they should leave the space blank. On the other hand, if the students are sure that some of the choices are definitely wrong and they are undecided between two answers, the chance of getting the right answer is high; this is an "educated guess." And, even if there is a penalty for wrong answers, making educated guesses can often be of benefit to students.

If there is no penalty for guessing, meaning that the grade is based only on the number of correct answers, nothing should be left blank. In this case, guessing will not decrease the grade and might increase it.

### After the Test

When your children's graded exam papers are returned, they can provide an additional opportunity for learning. First, they indicate where students are still having difficulty with the material. Your children should review this material again. This is particularly important for classes in which the material builds from one section to the next, as in math. Students who have not mastered the basics of algebra will not be

able to learn more complex algebra. Furthermore, your children can learn how to take tests better by looking over past tests and seeing how well they used their time, and by seeing whether guessing was a good idea. Then they can change what they do next time, if necessary. Your children should read all comments written by the teacher. If there are any comments that your children do not understand, they should ask the teacher to explain them.

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We want your children to do the best they can in school. We hope that the skills and strategies we've discussed will help you to help them make school and learning a rewarding experience.





## Further Reading

### General References

These materials discuss further a number of the techniques presented in this booklet. The discussions use non-technical terms and provide detailed explanations and guidelines.

Brown, W.F., & Holtzman, W.H. *Effective study guide*. (High school). San Marcos, Texas: Effective Study Materials, 1961.

Morgan, C.T., & Deese, J. *How to study*. New York: McGraw-Hill, 1957.

Pauk, W. *How to study in college* (2nd ed.). Boston: Houghton Mifflin, 1974.

Robinson, F.P. *Effective study* (Rev. ed.). New York: Harper and Brothers, 1970.

Woolfolk, R.L., & Richardson, F.C. *Stress, sanity, and survival*. New York: Monarch, 1978.

### Technical References

These books and articles discuss some of the research on which we based this booklet.

Maxwell, M. *Improving student learning skills*. San Francisco: Josey-Bass, 1979.

O'Neil, H.F., Jr. (Ed.). *Learning strategies*. New York: Academic Press, 1978.

O'Neil, H.F., Jr., & Spellberger, C.D. (Eds.). *Cognitive and affective learning strategies*. New York: Academic Press, 1979.

Sarason, I.G. (Ed.). *Test anxiety: Theory, research and application*. New York: Lawrence Erlbaum, 1978.

Weinstein, C.E. Elaboration skills as a learning strategy. In H.F. O'Neil, Jr. (Ed.), *Learning strategies*. New York: Academic Press, 1978.

Wittrock, M.C. Learning as a generative process. *Educational Psychologist*, 1974, 11, 87-95.

Wittrock, M.C. The cognitive movement in instruction. *Educational Psychologist*, 1978, 13, 15-29.